MODEL ROUTE

School:	School of Engineering Technology and Applied Science	**Program Number:**	3619

Program Title:	**Game - Programming Co-op**	**Credential:**	☐ Certificate　☐ Graduate Certificate　☐ Degree ☐ Diploma　☑ Advanced Diploma　☐ Centennial College Certificate

Program Delivery Mode:	☑ Co-Op　☑ Online ☐ Fast Track　☐ Hybrid ☐ Non Co-op	**Duration :**	☐ 1 Semesters　☐ 4 Semesters ☐ 2 Semesters　☑ 6 Semesters ☐ 3 Semesters　☐ 8 Semesters

Campus:	**ONLINE**	**Department Code:**	**3515**

Intake:	**Fall 2021 and Winter 2022**

Course Code	Course Title	Co/Pre Requisite (Course Code)	Lab Hours	Lecture Hours	Field Placement Hours	Course Delivery ODL=Online BLD=Blended HYB = Hybrid	Total Course Hrs (Lab + Lecture + Field)	Weeks (14)	Total Hours
Semester 1	**Fall 2021 or Winter 2022**								
COMM160/161 ◈	College Communications 1			3		ODL	3	14	42
COMP100 ◈	Programming 1		2	2		ODL	4	14	56
COMP213 ◈	Web Interface Design		4			ODL	4	14	56
COMP391 ◈	Introduction to Game and Simulation		2	2		ODL	4	14	56
GNED ◈	General Education Elective			3		ODL	3	14	42
MATH175 ◈	Functions and Number Systems			3		ODL	3	14	42
							Total		294
Semester 2	**Winter 2022 or Summer 2022**								
COMM170/171 ◈	College Communications 2	P=COMM160 or COMM161		3		ODL	3	14	42
COMP122 ◈	Introduction to Database Concepts		2	2		ODL	4	14	56
COMP123 ◈	Programming 2	P=COMP100	2	2		ODL	4	14	56
COMP125 ◈	Client-Side Web Development	P=COMP100 and COMP213	2	2		ODL	4	14	56
COMP225◈	Software Requirements Engineering	P=COMP100, and, COMP120 or COMP391	2	2		ODL	4	14	56
COMP253◈	Assets for Game Developers	P=COMP391	2	2		ODL	4	14	56
COMP301◈	UNIX/Linux Operating Systems	P=COMP100	2	2		ODL	4	14	56
							Total		378
Break	**Summer 2022**								
Semester 3	**Fall 2022**								
COMP228 ◈	Java Programming	P=COMP123	2	2		ODL	4	14	56
COMP229 ◈	Web Application Development	P=COMP123 and COMP125	2	2		ODL	4	14	56
COMP246 ◈	Software Systems Design	P=COMP123 and COMP225	2	2		ODL	4	14	56
COMP305◈	Game Programming 1	P=COMP123	2	2		ODL	4	14	56
COOP321/421◈	Employment Preplacement	P=COMM170/171 minimum"C" grade; CGPA 2.5; 80% year 1 courses completed		1		ODL	1	14	14
GNED500◈	Global Citizenship: from Social Analysis to Social Action			3		ODL	3	14	42
MATH185 ◈	Discrete Mathematics			3		ODL	3	14	42
							Total		322
Work Term 1	**Winter 2023**								
COOP222◈	Co-op Work Placement 1					ODL			
Semester 4	**Summer 2023**								
COMP217◈	C++ for Game Development	P=COMP123	2	2		ODL	4	14	56

Code	Course Name	Prerequisite				Modality			Hours
COMP254 ◈	Data Structures and Algorithms	P=COMP228	2	2		ODL	4	14	56
COMP311 ◈	Software Testing and Quality Assurance	P=COMP123	2	2		ODL	4	14	56
COMP397 ◈	Web Game Programming	P=COMP123	2	1		ODL	3	14	42
ENGL253 ◈	Advanced Business Communications	P=COMM170 or COMM171		3		ODL	3	14	42
MATH210 ◈	Linear Algebra and Statistics	P=MATH175 and MATH185	2	2		ODL	4	14	56
								Total	308
Work Term 2	**Fall 2023**								
COOP331◈	Co-op Work Placement 2					ODL			
Semester 5	**Winter 2024**								
COMP216 ◈	Networking for Software Developers	P=COMP100	2	2		ODL	4	14	56
COMP231◈	Software Development Project 1	P=COMP228 and COMP229 and COMP246	2	2		ODL	4	14	56
COMP256◈	Special Topics in Interactive Gaming	P=COMP305	3			ODL	3	14	42
COMP304◈	Mobile Apps Development	P=COMP228	2	2		ODL	4	14	56
COMP308◈	Emerging Technologies	P=COMP228 and COMP229	2	2		ODL	4	14	56
COMP392◈	Advanced Graphics	P=COMP217, and, COMP305	2	2		ODL	4	14	56
COMP395◈	Simulation Design	P=COMP305 and COMP391	2	2		ODL	4	14	56
								Total	378
Work Term 3	**Summer 2024**								
COOP332◈	Co-op Work Placement 3								
Semester 6	**Fall 2024**								
CNET307◈	IT Project Management	P=COMM170 or COMM171, and, CNET229 or COMP246	1	2		ODL	3	14	42
COMP313◈	Software Development Project 2	P=COMP231 and COMP303 and COMP304, or, COMP231 and COMP381, or, COMP231 and COMP305 and COMP391, or, COMP246 and COMP258	2	2		ODL	4	14	56
COMP394◈	Practical Game Design	P=COMP305 and COMP391	2	2		ODL	4	14	56
COMP396◈	Game Programming 2	P=COMP305 and COMP391	2	2		ODL	4	14	56
GNED◈	General Education Elective			3		ODL	3	14	42
								Total	252
Minimum Grade Required: D									
							Total Program Hours:		**1932**

C = Co-Requisite; P = Pre-Requisite

Notes:

◈This course may be offered in one of the following modalities (Online, Hybrid or Blended)